



Office of Design Training Plan

Table of Contents

Engineering/CADD (25 Courses/42 Sessions).....	4
1. AGI32 Lighting (CE-11-0041) (2 days)	4
2. FDOT Automated Quantities (CE-11-0103) (2 days)	4
3. FDOT Right of Way Mapping CADD Training - CE-11-0116 (4 days)	5
4. Hands on Training - Traffic Plans (3 Days).....	5
5. Traffic Plans Course – Signing & Pavement Markings (CE-11-0117) (2 days).....	5
6. Traffic Plans Course – Lighting (CE-11-0118) (1 day)	6
7. Traffic Plans Course – Signalization (CE-11-0119) (1 Day)	7
8. FDOT GEOPAK Drainage - For Design (CE-11-0120) (3 Day)	7
9. FDOT GEOPAK Drainage - For Plans Preparations (CE-11-0121) (3 Day)	8
10. AutoCAD Map 3D for Geospatial (CE-11-0131) (3 days).....	8
11. Regional CADD Training	9
12. FDOT Digital Delivery (CE-11-0136) (4 hrs)	9
13. FDOT Plan Development Workflows (CE-11-0137) (4 days)	9
14. FDOT Roadway Design and 3D Modeling Basic (CE-11-0138) (2 days).....	10
15. FDOT Roadway Design and 3D Modeling Advanced (CE-11-0139) (3 days)	10
16. AutoCad Civil 3D for Right of Way (CE-11-0141) (3 days).....	11
17. AutoCad Civil 3D for Survey (course # pending) (3 days)	11
18. AutoCad Civil – Advanced Topics (3 days) (CE-11-0142)	12
19. Hands-On Training (MicroStation Topics) (3 Days)	12
20. Hands-On Training (CE-11-0092) (3 days).....	13
21. Hands-On Training (CE-11-0092) (2 days).....	13
22. Florida Local User’s Group (FLUG)	14
23. Florida Local User’s Group (FLUG)	14
24. On-line course Development	15
25. Coaching & Mentoring Training	15
Project Review (1 Course/9 Sessions)	16
1. Electronic Review Comment Training	16
Production Support (4 Courses/14 Sessions)	17
2. ADA For Design & Construction (BT-05-0062)	17
3. ADA for Facilities (BT-05-0019).....	17
4. Project Management Workshop – 1 Day (BT-05-0126).....	17
5. Designing Landscapes for FDOT (1 Day) (BT-05-0184)	18
Roadway Design (13 Courses/24 Sessions)	19

1. Intersection Design (2 Day) (BT-05-0099)	19
2. Intersection Lighting (1 Day)	19
3. Basic Lighting (1 Day)	19
4. Realcost Lifecycle Cost Analysis Software Workshop	20
5. Mechanistic Training (4 Day Workshop)	20
6. Pond Design (PE-05-0011)	21
7. Hec – 18 Stream Stability & Bridge Scour	21
8. Drainage Standards	22
9. Storm Drain Design	22
10. Flexible Pavement Design	22
11. Pavement Marking Training	23
12. Pavement Type Selection (4 hour)	23
13. Design Exceptions and Variations Workshop (2-Day)	24
Surveying & Mapping (3 Courses/5 Sessions)	25
1. Software & Standards Trainings for Professional Surveyors and Mappers & Technical Staff	25
2. Title & Document Training – 3 days	25
3. TOPO & LiDAR Training	25
Additional Trainings	27
1. FDOT Design Training Expo	27
2. Webinars	27
1. Engineering Academy- weekly webinars hosted by the Office of Design	27
2. Wednesday Weekly Webinars – hosted by the Engineering/CADD office	27
3. CBT’s Computer based trainings	28
1. Consultant Performance Evaluation -Grades- CBT	28
2. Issues Common To All PMS - PT I, PM Handbook (CBT)	28
3. Project Mgt. - Construction (PM HBK CBT; Part II, CH 5) WBT	28
4. Project Mgt. - Design (PM HBK CBT; Part II, CH 3) WBT	28
5. Project Mgt. - Design-Build (PM HBK CBT; Part II, CH 6) WBT	28
6. Project Mgt. - LAP (PM HBK CBT; Part II, CH 8) WBT	28
7. Project Mgt. - Maintenance (PM HBK CBT; Part II, CH 7) WBT	28
8. Project Mgt. - PD&E (PM HBK CBT; Part II, CH 2) WBT	28
9. Project Mgt. - Planning (PM HBK CBT; Part II, CH 1) WBT	28
10. Project Mgt. - Right-of-Way (PM HBK CBT; Part II, CH 4) WBT	28
11. Value Engineering Reporting (VER) CBT	28
12. Flexible Pavement Design Web Based Training	28

13.	Horizontal Clearance WBT	28
14.	Highway Safety Manual (HSM) Online Overview (FHWA-NHI-380106)	28
On-line self-study		28
1.	Bentley E-learn	28
2.	rGuides (AutoDesk)	28

Engineering/CADD (25 Courses/42 Sessions)

1. AGI32 Lighting (CE-11-0041) (2 days)

This two day training is mission critical because the training encompasses changes and enhancements in released versions of the Lighting Analysts software suite for lighting design. There is a high demand from the aforementioned FDOT districts to receive this training which directly enhances user proficiency, so therefore directly effects production.

AGI32 Lighting Training Schedule FY 15/16:

District 1	February 2-3, 2016
District 2	April 19-20, 2016

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$32,250.00

Participants (travel + per diem): \$400 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

2. FDOT Automated Quantities (CE-11-0103) (2 days)

This two day training is mission critical because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release.

FDOT Automated Quantities Training Schedule FY 15/16:

District 1/7 – host in D1	March 8-9, 2016
---------------------------	-----------------

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO Instructor cost (travel + per diem): \$350.00

Participants (travel + per diem): \$0 cost participants are from D1 & D7

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

3. FDOT Right of Way Mapping CADD Training - CE-11-0116 (4 days)

This four day training is mission critical because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production for Right of Way Mapping.

FDOT Right of Way Mapping CADD Training Schedule FY 15/16:

District 2/3 Host in D2

September 21-25, 2015

Central Workshop – Host in D5

October 19-22, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$13,600

Participants (travel + per diem): \$525 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

4. Hands on Training - Traffic Plans (3 Days)

This three day training is mission critical because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production.

Hands on Traffic Plans Training Schedule FY 15/16:

District 3

September 14-18, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO Instructor cost (travel + per diem): \$500

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

5. Traffic Plans Course – Signing & Pavement Markings (CE-11-0117) (2 days)

This two day training is mission critical because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that

platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release.

FDOT Traffic Plans Course – Signing & Pavement Markings Training Schedule FY 15/16:

District 2	August 18-19, 2015
District 2	April 12-13, 2016
District 5	November 17-18, 2015
District 1/7 – host in D7	November 4-5, 2015
District 4/6 – Host in D6	January 12-13, 2016

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00 per day x 10 days = \$17,000

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

6. Traffic Plans Course – Lighting (CE-11-0118) (1 day)

This one day training is mission critical because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release.

FDOT Traffic Plans Course - Lighting Schedule FY 15/16:

Central Workshop - Bartow	October 8, 2015
---------------------------	-----------------

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00

Participants (travel + per diem): \$250 per participant (up to 2 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

7. Traffic Plans Course – Signalization (CE-11-0119) (1 Day)

This one day training is mission critical because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release.

FDOT Traffic Plans Course - Signalization Schedule FY 15/16:

District 2	May 10, 2016
District 4/6 – host in D4	March 8, 2016
District 5	January 27, 2016
District 1/7 - host in D1	October 7, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00 per day x 4 days = \$6,800.00

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

8. FDOT GEOPAK Drainage - For Design (CE-11-0120) (3 Day)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release.

FDOT GEOPAK Drainage - For Design Training Schedule FY 15/16:

District 2/3 – host in D2	November 17-19, 2015
Central Workshop – host in D1	September 29-October 1

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00 per day x 6 days = \$10,200.00

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

9. FDOT GEOPAK Drainage - For Plans Preparations (CE-11-0121) (3 Day)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production.

FDOT GEOPAK Drainage - For Plans Preparations Training Schedule FY 15/16:

District 3	December 1-3, 2015
Central Workshop (Hold in Bartow)	December 8-10, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00 per day x 3 days = \$10,200.00

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

10. AutoCAD Map 3D for Geospatial (CE-11-0131) (3 days)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for AutoDesk software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production.

AutoCAD Map 3D for Geospatial Training Schedule FY 15/16:

Central Workshop (Bartow)	January 12-14, 2016
District 4	February 9-11, 2016

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00 per day x 6 days = \$10,200

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

11. Regional CADD Training

This two-day course is mission critical to the department because this workshop provides the instrument for procuring training for AutoDesk & Microstation software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. This regional workshop will be taught by the Central Office CADD staff.

Regional CADD Training Schedule FY 15/16:

District 4	February 22-25, 2016
------------	----------------------

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO instructor cost (travel + per diem): \$250 per instructor x 8 = \$2000

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

12. FDOT Digital Delivery (CE-11-0136) (4 hrs)

This four-hour course is mission critical to the department because this workshop provides the instrument for delivery our Project files for project delivery.

FDOT Digital Delivery Training Schedule FY 15/16:

District 4	February 22, 2016
------------	-------------------

District 2	January 13, 2016
------------	------------------

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO instructor cost (travel + per diem): \$250

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

13. FDOT Plan Development Workflows (CE-11-0137) (4 days)

This four-day course is mission critical to the department because this workshop provides the instrument for procuring training for Microstation software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production.

FDOT Plan Development Workflows Schedule FY 15/16:

District 1

February 8-11, 2016

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO instructor cost (travel + per diem): \$600

Participants (travel + per diem): \$525 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

14. FDOT Roadway Design and 3D Modeling Basic (CE-11-0138) (2 days)

This two-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release. (Incorporates new release for SS3).

FDOT Roadway Design and 3D Modeling Schedule FY 15/16:

Central Workshop (District 1)

April 6-7, 2016

Central Office

September 15-16, 2016

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO instructor cost (travel + per diem): \$1,800.00

Participants (travel + per diem): \$250 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

15. FDOT Roadway Design and 3D Modeling Advanced (CE-11-0139) (3 days)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT. This training encompasses changes and enhancements in released and forthcoming versions of the FDOT CADD software suite and directly enhances user proficiency, so therefore directly effects production. Note this class is completely re-written for 3D design with the latest CADD software suite release. (Incorporates new release for SS3).

FDOT Roadway Design and 3D Modeling Schedule FY 15/16:

Central Workshop (District 1)	May 2-4, 2016
Central Office	October 13-15, 2015
District 4	September 4-6, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO instructor cost (travel + per diem): \$1,800.00

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

16. AutoCad Civil 3D for Right of Way (CE-11-0141) (3 days)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT.

AutoCad Civil 3D for Right of Way Training Schedule FY 15/16:

District 1	September 9-11, 2015
District 3	October 6-8, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$12,900

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

17. AutoCad Civil 3D for Survey (course # pending) (3 days)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT.

AutoCad Civil 3D for Survey Training Schedule FY 15/16:

Central Workshop	TBD
------------------	-----

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$6,450

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

18. AutoCad Civil – Advanced Topics (3 days) (CE-11-0142)

This three-day course is mission critical to the department because this workshop provides the instrument for procuring training for Bentley MicroStation Design software and CADD applications for that platform developed by FDOT.

AutoCad Civil – Advanced Topics Training Schedule FY 15/16:

District 1

September 21-23, 2015

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$6,450

Participants (travel + per diem): \$450 per participant (up to 5 per District based on need)

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

19. Hands-On Training (MicroStation Topics) (3 Days)

This class is various topics that the Districts have identified their particular needs for which custom content is being developed. These classes frequently also work on production data sets and advance production as part of the class.

Hands-On Training Schedule FY 15/16:

District 2

August 5-7, 2015

District 3

February 10-12, 2016

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$2,150.00 per day x 6 days = \$12,600

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

20. Hands-On Training (CE-11-0092) (3 days)

This class is various topics that the Districts have identified their particular needs for which custom content is being developed. These classes frequently also work on production data sets and advance production as part of the class.

Hands-On Training Schedule FY 15/16:

District 3	February 24-25, 2016
------------	----------------------

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

Contracted Training Fee: \$1,700.00 per day x 2 days = \$3,400

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

21. Hands-On Training (CE-11-0092) (2 days)

This class is various topics that the Districts have identified their particular needs for which custom content is being developed. These classes frequently also work on production data sets and advance production as part of the class.

Hands-On Training Schedule FY 15/16:

District 7	TBD
District 5	TBD

Workshop locations were determined by the individual training plan request and CADD Managers in each District.

Estimated training Costs:

CO Instructor cost (travel + per diem): \$500

Participants (travel + per diem): no cost

Number of participants: 15 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

22. Florida Local User's Group (FLUG)

The Florida Local User's Group (FLUG), which is co-instructed by FDOT staff, consultants, and our software vendors, provides concentrated face-to-face Computer Aided Drafting and Design (CADD) training including the latest versions of the production FDOT CADD software suite for both FDOT designers and consultants. It is Mission Critical that FDOT staff stays proficient in the effective application of CADD software on projects, and that the instructional staff (developers and support) understands user issues by maintaining efficient communication through this contact.

Date:	November 2015
Location:	TBD
Registration/Training Fees:	Registration fees for 98 total FDOT attendees @ \$175 each = \$17,150 + hands on workshops.
District estimated Travel Cost:	\$ 21,000 - 60 students from the Districts, overnight Travel costs covered by the traveler's Cost Center. (Note Districts 1 and 7 require no travel reimbursement to participate – Others no more than two nights travel)
Central Office estimated Travel Cost:	\$ 6,300 (18 attendees, of which 8 are instructors from various Design Offices)
Total estimated Cost (Statewide):	\$44,450 (Registration fees + Total Statewide Travel Cost)
Attendees:	10 students from each District, in order to cover the most critical of the 8 simultaneous training tracks. Changes in attendees or alternate will be provided by District Secretary or Chief Engineer.
Video Conference Available?	Attempts to train the same with technology based instruction (CBTs and Go-To-Meetings); have proven less successful due to the highly technical and specialized content of this training.

23. Florida Local User's Group (FLUG)

The Florida Local User's Group (FLUG), which is instructed by FDOT staff, consultants, and our software vendors, provides concentrated face-to-face Computer Aided Drafting and Design (CADD) training including the latest version of the production FDOT CADD software suite for both FDOT designers and consultants. It is Mission Critical that FDOT staff stays proficient in the effective application of CADD software on projects, and that the instructional staff

(developers and support) understands user issues by maintaining efficient communication through this contact. The FLUG is biannual conference.

Date:	June 2016
Location:	TBD
Registration/Training Fees:	Registration fees for 12 attendees @ \$225.00 each = \$2,700.00 + hands on workshops.
Central Office Travel Cost:	\$4,920.00 (12 instructors from various Offices)
Total Cost :	\$7,620.00 (Registration fees + Total Travel Cost)
Attendees:	No students from each District. Changes in attendees or alternate will be provided by District Secretary or Chief Engineer.

Video Conference Available? Attempts to train the same with technology based instruction (CBTs and Go-To-Meetings); have proven less successful due to the highly technical and specialized content of this training.

24. On-line course Development

AutoCAD Civil 3D - The Department wishes to purchase Development and Delivery of on-line videos to provide training and support statewide. This is mission critical to replace someone of the instructor lead training that has been cut due to the reduction in budget.
Cost Off-site Development and Delivery of Video's.

Estimated training Costs:

Contracted Training Fee: 35 hours x \$170.00 per hour = \$5,950.00

25. Coaching & Mentoring Training

To provide training and support via Go-To-Webinars and over the telephone for district AutoCAD Civil 3D projects. The Department wishes to purchase on call training and production support, ("Coaching and Mentoring"), for Statewide Civil 3D Projects intermediately for the period of July 7, 2015 through June 30, 2015. This is mission critical to replace some of the travel instructor lead training and in person production support that has been cut due to the reduction in budget.

Estimated training Costs:

Coaching and Mentoring Services: 48 hours @ \$170.00 per hour = \$8,160.00

Project Review (1 Course/9 Sessions)

1. Electronic Review Comment Training

It is mission critical to provide our Project Managers and/or Administrators training on how to electronically track the comments and responses from all Reviewer(s) and Subconsultant(s) for the Departments plan review and project submittals. This training is a hands-on computer based workshop with project examples and solutions.

Electronic Review Comment Training Schedule for FY 15/16:

District 1	TBD
District 2	TBD
District 3	TBD
District 4	TBD
District 5	TBD
District 6	TBD
District 7	TBD
Turnpike	TBD

Estimated training Costs:

CO Instructor Travel Cost: \$2,000

Participants (travel + per diem): no cost

Number of participants: 20 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

Production Support *(4 Courses/14 Sessions)*

2. ADA For Design & Construction (BT-05-0062)

This training is mission critical because the course will increase knowledge of ADA accessibility regulations and standards for Department staff; improve accessibility on state highway system. This training will assist the Department to comply with ADA as required under 28 CFR 35, 49 CFR 27 and 49 CFR 37.

ADA For Design & Construction Training Schedule for FY 15/16:

District 5 (2 Sessions)	March 9, 2016
Central Office	TBD
District 4/6	April 12, 2016

Estimated training Costs:

CO Instructor Travel Cost: \$650

Participants (travel + per diem): no cost

Number of participants: 60 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training. The course includes field exercises using mobility aids.

3. ADA for Facilities (BT-05-0019)

This training is mission critical because the course will increase knowledge of ADA accessibility regulations and standards for Department staff; improve accessibility on Department properties and buildings. This training will assist the Department to comply with ADA as required under 28 CFR 35, 49 CFR 27 and 49 CFR 37.

ADA For Facilities Training Schedule for FY 15/16:

District 4/6	April 12, 2016
--------------	----------------

Estimated training Costs:

CO Instructor Travel Cost: \$0.00 (Note: Travel for this course is concurrent with above travel to D4/D6; costs are described above.)

Participants (travel + per diem): no cost

Number of participants: 60 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training. The course includes field exercises using mobility aids.

4. Project Management Workshop – 1 Day (BT-05-0126)

This training is mission critical because it will provide participants the opportunity to learn and strengthen basic skills and tools for the application of the FDOT Project Management processes to enhance the effective delivery of Transportation projects. Through lectures, class discussion, and

exercises, participants will learn a number of critical project management principles including basic terminology, project life cycle, organizational structures, project initiation, scope & schedule development, and contract management.

Project Management Workshop Training Schedule for FY 15/16:

District 4	September 24, 2015
District 6	September 23, 2015
District 7	February 4, 2016
District 1	February 3, 2016
District 5/TP	February 2, 2016
District 3	April 6, 2016
District 2	May 4, 2016
Central Office	TBD

Estimated training Costs:

CO Instructor Travel Cost (2 instructors): \$2,400.00

Participants (travel + per diem): no cost

Number of participants: 40 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

5. Designing Landscapes for FDOT (1 Day) (BT-05-0184)

This training is mission critical because the new highway beautification policy, “highway beautification is everyone’s business.” Section 334.044, Florida Statutes requires the department to allocate 1.5% of the amount contracted for construction to highway beautification. Success for this program requires commitment and expertise in landscape planning, design, construction, and maintenance. The new policy and the BOLD Landscaping initiative has generated many questions and a big demand for training.

Highway Beautification Training Schedule for FY 15/16:

Central Workshop – Orlando Urban Office	November 17, 2015
District 3	March 8, 2016

Estimated training Costs:

CO Instructor Travel Cost: \$500 (2 instructors)

Participants (travel + per diem): \$250 per participant up to 5 per District based on need

Number of participants: 40 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

Roadway Design (13 Courses/24 Sessions)

1. Intersection Design (2 Day) (BT-05-0099)

This 2-day workshop is mission critical because the design and traffic operations engineers attending this class are currently designing intersections. The trainee is exposed to procedures in the Design Traffic Handbook, Plans Preparation Manual, AASHTO Greenbook, Highway Capacity Manual and the MUTCD. The software used includes Excel, Highway Capacity Software, SYNCHRO and MicroStation. Considering the impacts and costs, and the complexity of designing major urban intersections this class gives the trainee real experience that minimizes redesign and construction problems and facilitates the completion on current design projects.

Intersection Design Training Schedule for FY 15/16:

District 7	April 20-21, 2016
District 2	January 27-28, 2016

Estimated training Costs:

CO Instructor Travel Cost: \$1,400

Participants (travel + per diem): \$350 per participant up to 3 per District based on need

Number of participants: 20 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

2. Intersection Lighting (1 Day)

This 1-day workshop is mission critical because the design and traffic operations engineers attending this class are currently designing intersection lighting. Considering the impacts and costs, and the complexity of designing major urban intersections this class gives the trainee real experience that minimizes redesign and construction problems and facilitates the completion on current design projects.

Intersection Lighting Training Schedule for FY 15/16:

Central Workshop – Pilot

Estimated training Costs:

CO Instructor Travel Cost: \$250

Participants (travel + per diem): \$250 per participant up to 3 per District based on need

Number of participants: Max 20 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

3. Basic Lighting (1 Day)

This 1-day workshop is mission critical because the design and traffic operations engineers attending this class are currently designing highway lighting. Considering the impacts and costs, and the complexity of designing major urban roadway segments this class gives the trainee real experience that minimizes redesign and construction problems and facilitates the completion on current design projects.

Basic Lighting Design Training Schedule for FY 15/16:

District 6	July 21, 2015 (reschedule from 14/15)- Pilot
District 7	November 18, 2015
District 1	November 17, 2015
District 5	November 16, 2015
District 2	January 19, 2016
District 4	April 26, 2016

Estimated training Costs:

CO Instructor Travel Cost: \$1,250

Participants (travel + per diem): no cost

Number of participants: 20 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

4. Realcost Lifecycle Cost Analysis Software Workshop

This FHWA's pavement design life-cycle cost analysis software workshop is mission critical to provide pavement design engineers with a tool to perform LCCA for pavement selection in accordance with FHWA best practice methods.

Realcost Lifecycle Cost Analysis Software Design Training Schedule for FY 15/16:

Orlando, Florida (in conjunction with Expo) June 2016

Estimated workshop Costs: \$6,000

CO Instructor Travel Cost: \$250 per participant up to 3 per District based on need

Participants (travel + per diem): Max 20 participants per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

5. Mechanistic Training (4 Day Workshop)

This training is mission critical because FHWA considers implementation of mechanistic-empirical pavement design a critical element in improving the National Highway System. This workshop will provide pavement engineers with activities related to implementation of mechanistic-empirical design.

Mechanistic Training Design Training Schedule for FY 15/16:

Orlando, Florida Spring 2016

Estimated training Costs:

Contracted Training Fee: \$6,000

Participants (travel + per diem): \$525 per participant up to 3 per District based on need

Number of participants: 20 per workshop per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

6. Pond Design (PE-05-0011)

This training is mission critical because our Central Office and District Drainage Engineers (DDrE's) must maintain a high level of hydraulics expertise in order to effectively perform their duties as designers and plan reviewers for the Department's Work Program. Personnel need to have ongoing training to maintain their skills and effectively perform their duties. Due to budget constraints, our hydraulic engineers have lacked training for the past six to seven years. In addition, we have many new engineers, within the Districts and Central Office, which require this training as well. When formulating the budget for the 2014-2015 fiscal year, the main request from the DDrE's was training. When discussing training needs with our DDrE's in May 2014, this course was specifically requested.

Pond Training Schedule for FY 15/16:

District 7	March 16 -17, 2016
District 4/6	April 5-6, 2016

Estimated training Costs:

CO Instructor Travel Cost: \$1,050.00 (3 Instructors x 2 nights)
Participants (travel + per diem): \$ 7,350.00 (\$350.00 per participant)
Number of participants: 3 per District per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

7. Hec – 18 Stream Stability & Bridge Scour

The National Highway Institute's (NHI) 3-day Stream Stability and Scour at Highway Bridges course provides participants with comprehensive training in the prevention of hydraulic-related bridge failures. Course participants will receive training in conducting a stream stability classification and qualitative analysis of stream response and make estimates of scour at a bridge opening.

Hec-18 Design Training Schedule for FY 15/16:

Central Workshop	November 2015
------------------	---------------

Estimated training Costs:

Participant registration Cost: \$ 850 per participant x 24 students = \$20,400
Participants (travel + per diem): \$525 per participant x 24 students = \$12,600
Number of participants: 3 per District per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

8. Drainage Standards

Introduce design engineers who are not familiar with the drainage design standards to organization and layout of the information contained in the Drainage Standards.

Drainage Standards Design Training Schedule for FY 15/16:

Tallahassee

Spring 2016

Estimated training Costs:

CO Instructor Travel Cost: \$0

Participants (travel + per diem): \$250 per participant up to 3 per district based on needs

Number of participants: 3 per District per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

9. Storm Drain Design

This training is mission critical because our Central Office and District Drainage Engineers (DDrE's) must maintain a high level of hydraulics expertise in order to effectively perform their duties as designers and plan reviewers for the Department's Work Program. Personnel need to have ongoing training to maintain their skills and effectively perform their duties. Due to budget constraints, our hydraulic engineers have lacked training for the past six to seven years. In addition, we have many new engineers, within the Districts and Central Office, which require this training as well. When formulating the budget for the 2014-2015 fiscal year, the main request from the DDrE's was training. When discussing training needs with our DDrE's in May 2014, this course was specifically requested.

Storm Drain Design Training Schedule for FY 15/16:

District 4/6 TBD

Central Workshop TBD

Estimated training Costs:

Contracted Training Fee:: \$20,000

Participants (travel + per diem): \$525 per participant up to 3 per district based on needs

Number of participants: 3 per District per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

10. Flexible Pavement Design

This class is mission critical to comply with the districts Tress Training needs for this course. This training is needed for district personnel involved with Flexible Pavement Design and to train personnel in the relevant design policies and procedures which covers both new construction and pavement rehabilitation.

Flexible Pavement Design Training Schedule for FY 15/16:

District 5 November

District 2 March 8, 2016
District 4 February 2, 2016

Workshop locations were determined by the individual training plan request and Training Managers in each District.

Estimated training Costs:

CO Instructor Travel Cost: \$500

Participants (travel + per diem): no cost

Number of participants: 40 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

11. Pavement Marking Training

This travel is mission critical because construction and maintenance personnel attending the class need to understand the specifications and testing requirements for pavement markings. The training provides an understanding of important application requirements for all pavement markings and results of improper application. The training goes through each pavement marking specification, testing and documentation requirements. This training gives attendee's the tools inspectors need to adequately inspect to insure pavement markings are installed in accordance with Department specifications.

Pavement Marking Training Schedule for FY 15/16:

District 5 Fall 2015

Estimated training Costs:

CO Instructor Travel Cost: \$500.00

Participants (travel + per diem): no cost

Number of participants: 40 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

12. Pavement Type Selection (4 hour)

This class is mission critical to comply with the districts Tress training needs for this course. This training is needed for District personnel involved with Pavement Type Selection process and to train personnel in the relevant design policies and procedures which covers both new construction and pavement rehabilitation.

Pavement Type Selection Training Schedule for FY 15/16:

District 5 January 26, 2016 8-12

Workshop locations were determined by the individual training plan request and Training Managers in each District.

Estimated training Costs:

CO Instructor Travel Cost: \$500.00

Participants (travel + per diem): no cost

Number of participants: 40 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

13. Design Exceptions and Variations Workshop (2-Day)

Design criteria forms the basis by which highway designers strive to balance cost, safety, mobility, social and environmental impacts, and the needs of a wide variety of roadway users. On occasion, designers encounter situations in which the appropriate solution may suggest that using a design value or dimension outside the normal range of practice is necessary. In these cases, a design exception may be considered. A design exception is a documented decision to design a highway element or a segment of highway to design criteria that do not meet minimum values or normal range of practice is necessary. There has been an increase in prepared design exceptions that are rejected due to misinterpretation of accident data, void of mitigation strategies or misinterpretation of benefit-cost reports. Training will be provided as a hands-on workshop in an effort to improve documentation and reduce rejection rates.

Design Exceptions and Variations Training Schedule for FY 15/16:

District 4	TBD
District 2	TBD

Workshop locations were determined by the individual training plan request and Training Managers in each District.

Estimated training Costs:

CO Instructor Travel Cost: \$1,200.00

Participants (travel + per diem): no cost

Number of participants: 40 per workshop

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

Surveying & Mapping (3 Courses/5 Sessions)

1. Software & Standards Trainings for Professional Surveyors and Mappers & Technical Staff

These trainings are mission critical because they ensure statewide uniformity of professional and technical level processes (CPR) performed individually by District and consultant staff. Additionally, these trainings reduce exposure of the Department to liability through assuring compliance of Department Surveying and Mapping Program activities with applicable Florida Statutes and Administrative Codes. Professional Surveyors & Mappers and technical staff within the Department rely on the knowledge, skills and abilities developed during these trainings to manage, perform and certify work meeting regulatory objectives of Chapter 472, Florida Statutes and 5J-17 of the Florida Administrative Code.

3 scheduled 3 day training blocks of instruction, Statewide, Videoconference
Dates for these workshop are TBD

Estimated Training Costs:

Contracted Training Fee: \$1200.00 per day x 9 days = \$10,800.00

Participants (travel + per diem): no cost

Number of participants: unlimited (cost for video-broadcasting)

2. Title & Document Training – 3 days

This training is mission critical because FDOT depends on accurate analysis of land titles and documents pertaining to roadway acquisitions. The work is either being performed or reviewed by FDOT Title & Documents personnel that must be knowledgeable about all aspects of the processes involved. This knowledge requires basic concept training as well as training in the latest legal nuances that affect land ownership and transfer of land ownership rights. Not having trained personnel may result in land title conflicts that would delay roadway projects and would also lead to monetary judgments against FDOT for liability issues.

Title and Document Training Schedule for FY 15/16:

Location: TBD

Date: TBD

Estimated training Costs:

Contracted Training Fee: \$5,000.00

Participants (travel + per diem): \$16,800.00 (\$480 per participant)

Number of participants: 5 per district

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

3. TOPO & LiDAR Training

TopoDOT software training is mission critical because broad efficient use of this Department software package provides a cost effective way to analyze, quality control, and map three dimensional (3D) geospatial data collected using static and mobile Light Detection and Ranging

(LiDAR) remote sensing technology. As the Department moves forward with 3D planning, design, and Automated Machine Guidance (AMG) in construction, efficient use of this software to handle very large 3D geospatial datasets is becoming even more common. Without structured training the learning curve for department staff may impact production and quality assurance on current remote sensing projects, and delay implementation of a true 3D design project workflow.

TOPO & LiDAR Training Schedule for FY 15/16:

Location: Regional

Date: TBD

Estimated training Costs:

Contracted Training Fee: \$10,000.000

Participants (travel + per diem): \$16,800.00 (\$480 per participant)

Number of participants: 5 per district

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

Additional Trainings

1. FDOT Design Training Expo

It is mission critical that FDOT personnel and design consultants attend the Design training Expo to receive the latest training available from DOT. The delivery of this comprehensive training is critical to the Office of Design mission to lead, guide and support the design community to deliver innovative transportation solutions. It will also help us maintain consistent, predictable and repeatable results across the state. A wide variety of topics will be presented from all Office of Design functional areas, with additional selected training from cross functional stakeholders such as Traffic Operations, Right of Way, Construction, Maintenance and the Federal Highway Administration. 100% of the agenda will be dedicated to addressing design training needs and targeting those who are involved day to day in actual design and project management, important technical information across a wide spectrum will be presented, including updates to policies, procedures, and manuals. As an added bonus, some topics will provide an interesting glimpse of fascinating new technologies and tools coming on line now and in the near future. This training event will increase knowledge and result in improved quality and efficiency for internal and external users and stakeholders.

FDOT Design Training Expo Schedule for FY 15/16:

Location: Regional

Date: TBD

Estimated training Costs:

Estimated Workshop Cost: \$20,000 (A/V and Supplies)

Participants (travel + per diem): \$360 per attendee up to 50 per district

Number of participants: 50 per district + speakers and staff

Videoconference training was considered for this course but was determined to be impractical based on the content, interactivity, and skills transfer necessary for the success of the training.

2. Webinars

1. Engineering Academy- weekly webinars hosted by the Office of Design
2. Wednesday Weekly Webinars – hosted by the Engineering/CADD office

3. CBT's Computer based trainings

1. Consultant Performance Evaluation -Grades- CBT
2. Issues Common To All PMS - PT I, PM Handbook (CBT)
3. Project Mgt. - Construction (PM HBK CBT; Part II, CH 5) WBT
4. Project Mgt. - Design (PM HBK CBT; Part II, CH 3) WBT
5. Project Mgt. - Design-Build (PM HBK CBT; Part II, CH 6) WBT
6. Project Mgt. - LAP (PM HBK CBT; Part II, CH 8) WBT
7. Project Mgt. - Maintenance (PM HBK CBT; Part II, CH 7) WBT
8. Project Mgt. - PD&E (PM HBK CBT; Part II, CH 2) WBT
9. Project Mgt. - Planning (PM HBK CBT; Part II, CH 1) WBT
10. Project Mgt. - Right-of-Way (PM HBK CBT; Part II, CH 4) WBT
11. Value Engineering Reporting (VER) CBT
12. Flexible Pavement Design Web Based Training
13. Horizontal Clearance WBT
14. Highway Safety Manual (HSM) Online Overview (FHWA-NHI-380106)

On-line self-study

1. Bentley E-learn
2. rGuides (AutoDesk)